

**DENSITY EFFECTS ON ELECTRON COLLISIONAL RATES**

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**ABSTRACT**

Electron collisional rates of atoms in dense plasmas are considered using a simple model. Comparisons to quantum kinetic theory results suggest that the main impact of the plasma on non-equilibrium models is due to continuum lowering. Density effects beyond continuum lowering are smaller but uncertain since usual approximations necessary for numerical calculations may introduce anomalous behavior. Furthermore, the analysis indicates that in spite of the previously reported large density effects on collisional rates the expected impact on population kinetics may not be realized.

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